

We claim:

1. A printing mechanism, comprising:  
a printhead that defines a printzone;  
5 a tray adapted to support at least one sheet of print media, said tray adapted to move through said printzone during printing by said printhead on said sheet.
2. A printing mechanism according to claim 1 wherein said printhead defines a scanning axis, wherein said printhead moves along said scanning axis  
10 during printing, and wherein said tray moves perpendicular to said scanning axis during printing.
3. A printing mechanism according to claim 1 further comprising a body, and wherein said printhead is positioned within said body and said tray moves  
15 through said body during printing.
4. A printing mechanism according to claim 1 wherein said tray is adapted to support a stack of sheets of print media.
- 20 5. A printing mechanism according to claim 4 wherein a top sheet of said stack is exposed to said printhead during printing.
6. A printing mechanism according to claim 1 wherein said tray includes position indicia thereon and said printing mechanism further comprises a  
25 tray position sensor adapted to read said position indicia.
7. A printing mechanism according to claim 1 further comprising a guide device adapted to space said sheet a predetermined distance from said printhead during printing.

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8. A printing mechanism according to claim 3 wherein said body includes a first tray advancing mechanism and said tray includes a second tray advancing mechanism that mates with said first tray advancing mechanism.

5 9. A printing mechanism according to claim 8 wherein said first tray advancing mechanism comprises a gear and said second tray advancing mechanism comprises a track of recessed grooves.

10 10. A printing mechanism according to claim 1 wherein said tray supports said sheet stationarily with respect to said tray as said tray moves through said printzone.

11. A printing mechanism according to claim 1 wherein said tray moves from a start position, in a first direction, during printing and wherein said tray moves in a second direction, opposite to said first direction, after printing to return to said start position.

12. A printing mechanism according to claim 1 wherein said tray includes a biasing device that biases said sheet into a printing position within said tray.

13. A printing mechanism according to claim 1 wherein said tray is adapted to support said sheet generally across an entire lower surface of said sheet.

25 14. A printing mechanism, comprising:  
a tray that supports at least one sheet of print media, said tray including a tray advancing device that advances said tray through a stationary printzone during printing on said sheet.

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15. A printing mechanism according to claim 14 wherein said tray advancing device comprises a track of regularly spaced recesses adapted to mate with a tray advancing gear of a body of a printing mechanism.

5 16. A printing mechanism according to claim 14 wherein said tray further comprises positioning indicia adapted to facilitate sensing of a position of said tray relative to said printzone.

10 17. A printing mechanism according to claim 14 wherein said tray further comprises a sheet retention device and a biasing device for biasing said sheet against said sheet retention device.

15 18. A printing mechanism according to claim 17 wherein said retention device comprises a plurality of arms adapted to contact a top surface of said sheet in an edge region thereof.

19. A printing mechanism according to claim 17 wherein said biasing device comprises a support plate and a spring.

20 20. A printing mechanism, comprising:  
support means for stationarily supporting a sheet of print media relative to said support means;  
advancing means for advancing said support means through a printzone; and  
printing means for printing on said sheet as said support means is advanced  
25 through said printzone.

21. A printing mechanism according to claim 20 further comprising sensing means for sensing a position of said support means as said support means is advanced through said printzone.

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22. A printing mechanism according to claim 20 wherein said support means supports said sheet in a generally flat orientation during printing on said sheet.

23. A printing mechanism according to claim 20 wherein said advancing means is adapted for retracting said support means through said printzone after printing.

24. A printing mechanism according to claim 20 further comprising guide means for spacing said sheet a predetermined distance from said printing means during printing.

25. A printing mechanism according to claim 20 wherein said printing means comprises an inkjet printhead.

26. A printing mechanism according to claim 20 further comprising coating means for coating said sheet with a coating after printing thereon.

27. A method of printing, comprising:  
 providing a sheet of print media having a length;  
 providing a support for supporting said sheet along said length;  
 moving said support, and said sheet supported stationarily thereon, through a printzone; and  
 printing on said sheet as said support is moved through said printzone.

28. A method of printing according to claim 27 further comprising retracting said support, and said sheet supported stationarily thereon, rearwardly through said printzone after printing.

29. A method of printing according to claim 27 further comprising removing said sheet from said support so as to expose a second sheet and thereafter repeating said method for printing on said second sheet.

30. A printing mechanism, comprising:

a housing;

5 a movable print media tray for supporting a sheet of print media thereon, said tray including retention arms, a support plate and a biasing device for biasing said support plate against said retention arms so as to support said sheet in a generally flat printing position within said tray, said tray further including positioning indicia and a track of regularly spaced recesses;

10 a printhead positioned within said housing that defines a stationary printzone having a scanning axis;

a motor positioned within said housing;

a gear positioned within said housing, said gear powered by said motor and mating with said regularly spaced recesses of the tray so as to move the tray through said printzone perpendicular to said scanning axis during printing on said sheet; and

15 a position sensor positioned within said housing so as to sense said positioning indicia on said tray as said tray is moved through said printzone.

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